CR-IR346/348CL Service Manual

SP: Service Parts

WARNING

This manual is written for International distribution (including distribution in the U.S.) and therefore may contain references to mammography related options.
Mammography functionality for this product is not commercially available in the US, pending FDA Approval.
This functionality must not be activated on US models, the only breast related functionality available in the U.S. is the Specimen Imaging Application.

Control Sheet

Issue date	Revision number	Reason	Pages affected
10/20/2000	00	New release (FM2862)	All pages
12/10/2000	00	Revision (FM2950)	Pages I, II, 1, 6, 8, 10, 13, 15, 16
04/10/2001	01	Previous Chapter C “Error Information/Service Parts” divided and modified (FM2951)	All pages
05/30/2001	02	Revision (FM3027)	I, II, 3, 4
08/30/2001	03	Revision for software version A04 (FM3125)	I, II, 3, 4
03/20/2002	04	Revision for software version A07 (FM3297)	I, II, 4
11/30/2002	06	Revision for software version A09 (FM3499)	I, II, 4-6
03/01/2003	07	Revision for software version A10 (FM3634)	I, II, 4
02/20/2004	10	A new production tool adopted and layout design changed (FM4220)	All pages
07/30/2004	11	Revision for software V2.0(B) (FM4254)	I, II, 1, 3–5
11/12/2004	12	Support provided to NEC PC and corrections (FM4450)	I–IV, 6–8
07/30/2005	14	Support provided to NEC PC (RAID specifications) and corrections (FM4543)	I, II, 3–7

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1. Service Parts List

1.1 How to Use Service Parts List

■ RANK

❍ Parts handling ID symbols used to identify the parts requiring special operation
The ID symbols are assigned to applicable parts. Parts without the R mark are replaced and handled in a regular manner.

Symbol	Description
R	Repairable parts
Q, T	Symbol for use other than in Japan

❍ Export regulation mark
This + mark is assigned to the parts subject to Export regulations. Parts without the + mark are not subject to Export regulations.

Symbol	Description
+	Parts subject to Export regulations

❍ Fault rankings used for estimating the recommended stock quality
All parts are assigned a symbol letter from A to E.

Symbol	Description
A	Consumable parts or parts that will be replaced at short intervals
B	Parts that may become faulty accidentally and have a relatively high failure rate
C	Parts that have a sufficiently long MTBF, but are expected to have a high failure rate
D	Parts that have a sufficiently long MTBF, but are expected to become faulty
E	Parts that are necessary for fault analysis or parts that may be needed in case of faults such as man-induced damage

❍ RANK column description
The symbols for Fault Ranking, Parts Handling, and Export regulation are assigned in order named. Thus, one to three letters are put in the RANK column.

■ REF. NO.

A number for indicating each part in the Service Parts Exploded Views.

■ PART NUMBER

A code number that is unique to each part. The rightmost letter of the code number has the following meaning.

❍ For hardware
The letter denotes the version number of a part. If parts have different version numbers, they are upward-compatible.

❍ For software
The letter denotes the software specifications.

■ PART NAME

This represents the general name of a part.

■ QTY.

QTY. represents the quantity of parts used in a unit or assembly.

■ REMARKS

Unique name of a part or its relevant information or note is described in this column.

■ SERIAL NUMBER

The units may contain different parts depending on their shipment control number. SERIAL NUMBER indicates the shipment control number to which the parts are applicable. If this column is blank, the parts are applicable to all the relevant units.

■ Recommended quantity of spare parts

It is recommended as a rough guide to hold in stock a specified quantity of parts according to the rank (A to E) assigned to the parts. Parts to be replaced at periodic intervals must be held in stock separately.
Adjust the quantity of parts stock depending on the number of working units (N) as prescribed below.
Q: Quantity used in a single system

❍ N = 1

Rank A = 1 + Q × 0.3
Rank C = 1 + Q × 0.05
Rank D = 1 + Q × 0.02

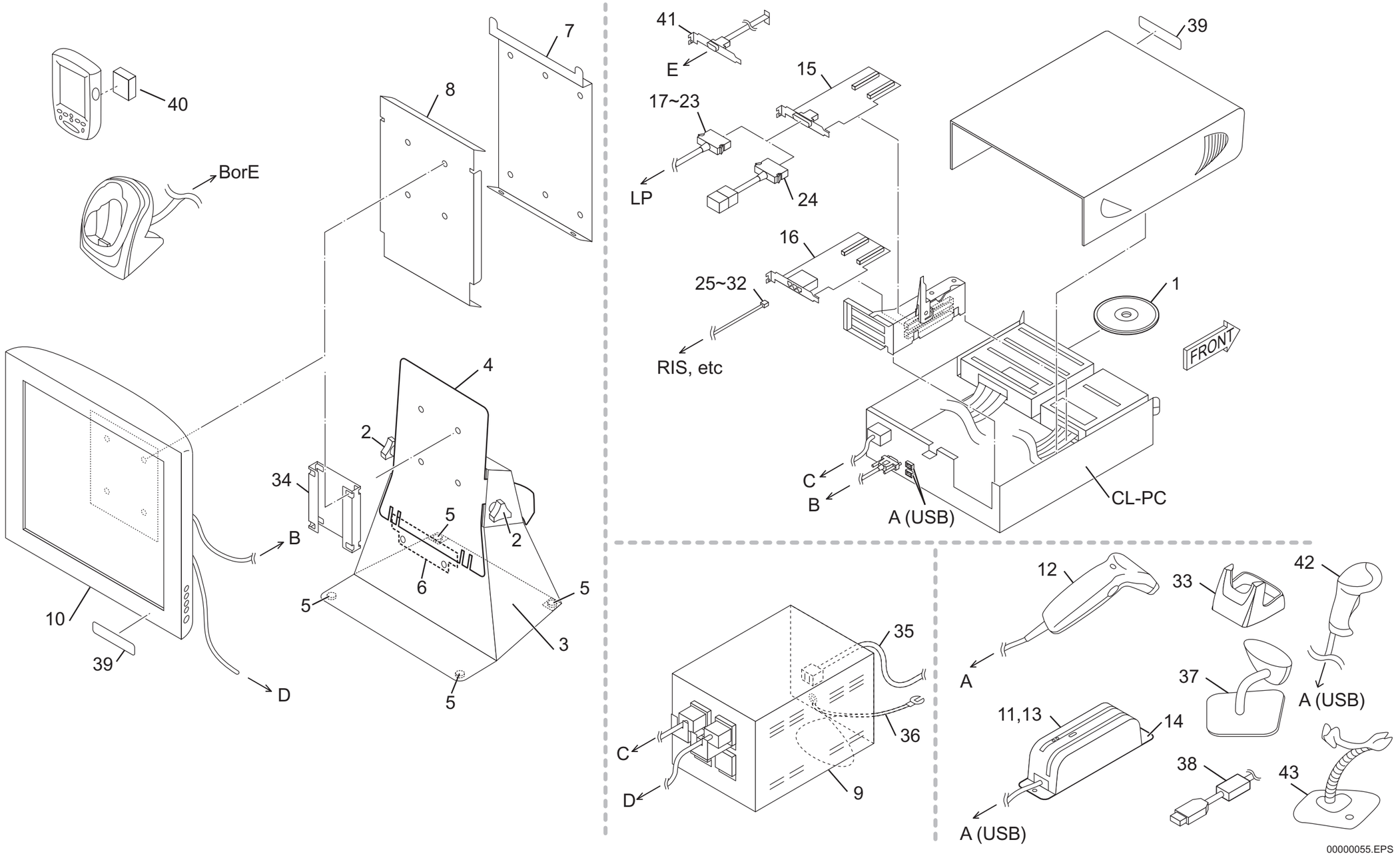
❍ 2 ≤ N ≤ 10

Rank A = 2 + N × Q × 0.3
Rank C = 2 + N × Q × 0.05
Rank D = 1 + N × Q × 0.02

❍ 11 ≤ N ≤ 300

Rank A = 3 + N × Q × 0.3
Rank C = 3 + N × Q × 0.05
Rank D = 2 + N × Q × 0.02

1.2 Service Parts List



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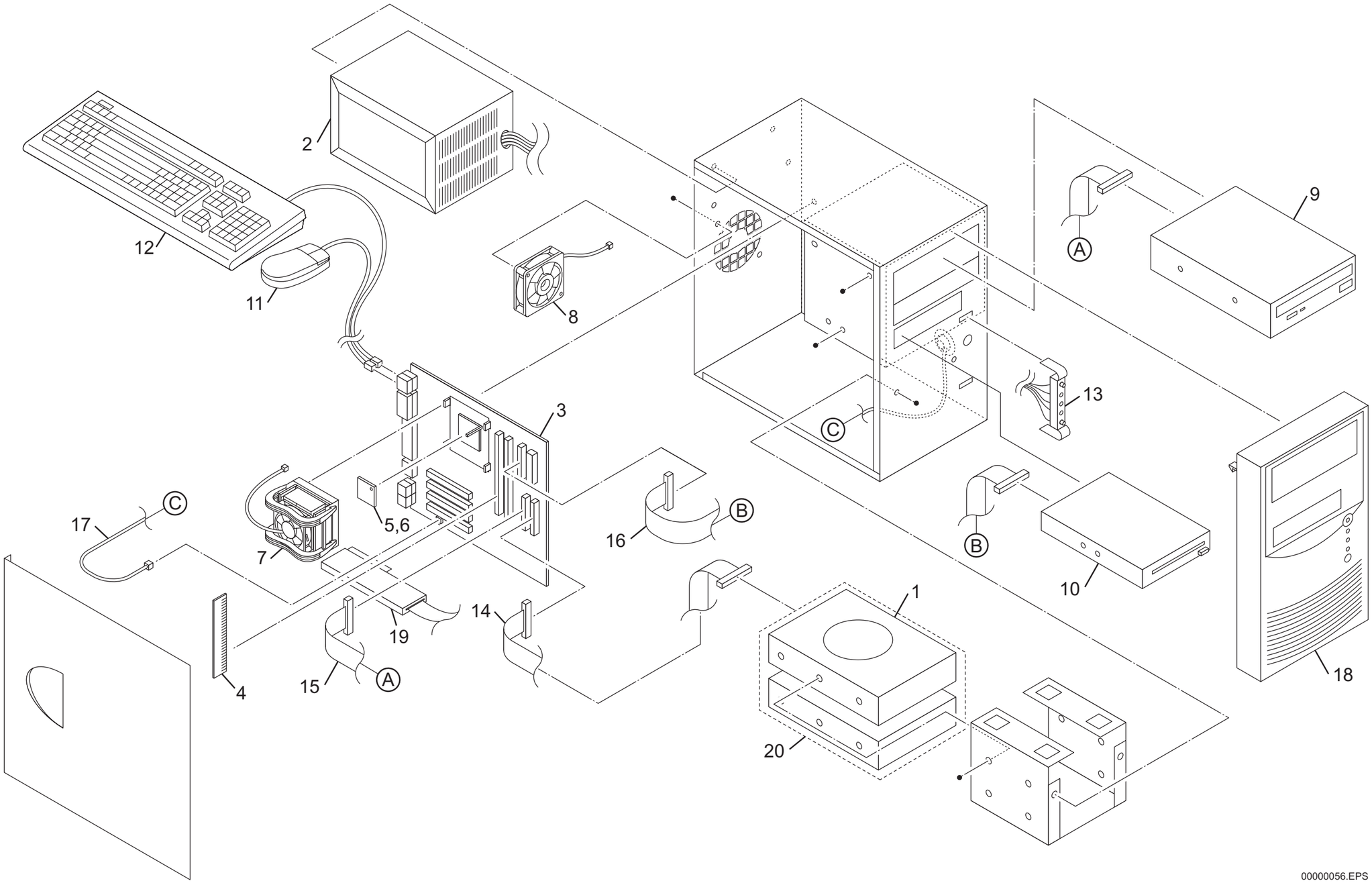
RANK	REF.	PRAT UMBER	PART NAME	QTY.	REMARKS	SERIAL NUMBER
E	1	114Y5342001A	Software	1	Main unit software	
E	2.1	340N0205	Knob	2	For LCD stand	
E	2.2	340N0227	Knob	2	For LCD stand (black)	
E	3.1	357N1405	Table	1	For LCD stand	
E	3.2	357N1455	Table	1	For LCD stand (black)	
E	4.1	357N1406	Table	1	For LCD stand	
E	4.2	357N1456	Table	1	For LCD stand (black)	
D	5	367N0021	Rubber foot	4	For LCD stand	
E	6	401N0811	Retaining plate	1	For LCD stand	
E	7	357N1428	Table	1	For wall-mounting LCD	
E	8	357N1429	Table	1	For wall-mounting LCD	
D	9.1	813Y0142A/B	Power supply	1	CR-IR346CL Insulating transformer (only for units used in Japan)	
D	9.2	813Y0145A/B	Power supply	1	CR-IR348CL Insulating transformer (only for units used in Japan)	
CR	10.1	849N0067A	Monitor display	1	LCD (9415TD15/G2)	Function repair
CR	10.2	849Y0094/B	Monitor display	1	LCD (9415TD15/H2 or 9416 TD15/H2-1)	Function repair
CR	10.3	849Y0095	Monitor display	1	LCD (L350P-TS (black))	Function repair
CR	10.4	849Y0099	Monitor display	1	LCD (L351P-TS (black))	Function repair
CR	10.5	849Y0103	Monitor display	1	LCD (L362T)	Function repair
D	11	852Y0082	Image reading unit	1	MCR-JIS	
D	12.1	852N0023A	Image reading unit	1	BCR	DENSO HC36TU-K
D	12.2	852N0026A	Image reading unit	1	BCR	Optoelectronics OPT-6125-USB
D	12.3	852N0032	Image reading unit	1	BCR	Symbol LS1908T
D	13	852Y0083	Image reading unit	1	MCR-ISO	
E	14	357N1408	Table	1	For wall-mounting MCR	
CR	15	113Y1405B	PEI01A	1	E-i/f serial board	
CR	16	113Y1502A	PSI04A	1	Serial i/f board	
E	17	136Y5869A	FCR i/f cable	1	5m	
E	18	136Y5870A	FCR i/f cable	1	15m	
E	19	136Y5871A	FCR i/f cable	1	30m	
E	20	136Y5872A	FCR i/f cable	1	45m	
E	21	136Y5873A	FCR i/f cable	1	60m	
E	22	136Y5874A	FCR i/f cable	1	100m	

RANK	REF.	PRAT UMBER	PART NAME	QTY.	REMARKS	SERIAL NUMBER
E	23	136Y5875A	FCR i/f cable	1	150m	
E	24	136Y5868A	Conversion cable	1	1.2m	
E	25	136Y5757	Cable	1	CL - RIS OP-09/VH-05 RIS terminal 3m (D-sub 9pin)	
E	26	136Y5758	Cable	1	CL - RIS OP-09/VH-06 RIS terminal 5m (D-sub 9pin)	
E	27	136Y5759	Cable	1	CL - RIS OP-09/VH-07 RIS terminal 10m (D-sub 9pin)	
E	28	136Y5760	Cable	1	CL - RIS OP-09/VH-08 RIS terminal 15m (D-sub 9pin)	
E	29	136Y5761	Cable	1	CL - RIS/X-ray OP-09/VH-01 3m for RIS terminal/X-ray equipment connction (D-sub 25pin)	
E	30	136Y5522	Cable	1	CL - RIS/X-ray OP-09/VH-02 5m for RIS terminal/X-ray equipment connction (D-sub 25pin)	
E	31	136Y5523	Cable	1	CL - RIS/X-ray OP-09/VH-03 10m for RIS terminal/X-ray equipment connction (D-sub 25pin)	
E	32	136Y5524	Cable	1	CL - RIS/X-ray OP-09/VH-04 15m for RIS terminal/X-ray equipment connction (D-sub 25pin)	
E	33	357S0024	Rack	1	For the BCR	
E	34	347N1785	Bracket	1	Spacer (exclusively for 9416TD15/H2-F)	
E	35	136Y8551	Cable	1	Hospital-grade (only for units used in Japan), 136Y8550+fastener	
E	36	136Y8546	Cable	1	Hospital-grade option (only for units used in Japan)	
E	37	357N1528	Rack	1	For the BCR (exclusively for Symbol LS1908T)	
D	38	898Y1008	Ferrite kit	1		
E	39	405N3111	Name plate	2	For the Japanese version only	
D	40	125N0299	Battery	1	PDA lithium battery (only for units used in Japan)	
C	41	136S1245	Cable	1	Extension serial connector cable (only for units used in Japan)	
D	42	852N0036A	Image reading unit	1	BCR (model: BH2104-FF1)	Symbol LS2208T
E	43	357N1611	Rack	1	For the BCR (exclusively for BH2104-FF)	

1.3 Service Parts List (NEC PC: Applicable only for overseas users)



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RANK	REF.	PRAT UMBER	PART NAME	QTY.	REMARKS	SERIAL NUMBER
DQ	1	850N0013	HDD	1		
CQ	2	125N0137	Power supply	1		
CQ	3	113Y1838	PC board	1	Motherboard	
DQ	4	102N0085	IC	1	DIMM-DDR-512-NECC	
DQ	5	102N0087	IC	1	Pentium4 2.8GHz	
DQ	6	102N0086	IC	1	Celeron 2GHz	
D	7	119N0011	Fan	1	CPU fan	
D	8	119N0012	Fan	1	Housing fan	
D	9	852N0035	CD-ROM drive	1		
D	10	850N0014	FDD	1		
E	11	128N0078	Mouse	1	PS/2 mouse	
E	12	128N0077	Keyboard	1	Model 104 keyboard	
D	13.1	128N0080	Power supply SW	1	Power supply SW assembly	
D	13.2	128N0081	LED/SW cable	1	(RAID specification)	
E	14	136N0455	Cable	1	HDD signal cable * This is a special cable, which cannot be substituted by any other cable.	
E	15	136N0456	Cable	1	CD-ROM unit signal cable	
E	16	136N0457	Cable	1	FDD unit signal cable	
E	17	136N0458	Cable	1	Speaker cable	
E	18	350N3135	Cover	1	Front bezel	
CQ	19	113Y1856	PC board	1	RAID board (RAID specification)	
DQ	20	850N0015	HDD	1	(RAID specification)	

◆ *NOTE* ◆

When you are asking for replacing a part free of charge, use the error analysis tool (TeDoLi) to attach error log of a part that caused an error to occur.

☞ **For details of the device test procedures, see “5.1.2 Device Test Procedures” under “MT: Machine Troubleshooting”.**

☞ **For details of the error log save procedures, see “5.1.3 Log Save Procedure” under “MT: Machine Troubleshooting”.**

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